

Technical drawing of a 1.0-5P CTXJ-H2.5 119 component, showing dimensions and material specifications.

Technical Specifications:

- 1. Rated Current: 0.5A.
- 2. Temperature Range: -25~85°C
- 3. Rated Voltage: 50V, AC/DC (Equivalent)
- 4. Contact Resistance: $\leq 0.03\Omega$
- 5. Insulation Resistance: $\leq 500M\Omega$

Dimensions and Tolerances:

- 1.8 $\pm$ 0.1
- 1.0 $\pm$ 0.05
- DIM A $\pm$ 0.1
- 1.91
- 1.39
- 2.5 $\pm$ 0.15
- 0.9
- 6.65 $\pm$ 0.15
- 0.25 $\pm$ 0.03
- 2.47 $\pm$ 0.05
- 5.2 $\pm$ 0.1
- 3.9 $\pm$ 0.1
- 1.4 $\pm$ 0.1
- 0.65 $\pm$ 0.03
- 1.0 $\pm$ 0.05
- DIM A $\pm$ 0.1
- 4.32 $\pm$ 0.05
- 5.05
- 3.4 $\pm$ 0.05
- 3 $\pm$ 0.05
- 0.3 $\pm$ 0.03
- DIMB $\pm$ 0.05
- DIMA $\pm$ 0.05
- DIMC $\pm$ 0.15
- DIM A $\pm$ 0.1
- 1.0 $\pm$ 0.05
- 3 $\pm$ 0.05

Material Specifications:

序号	品名	材质
①	1.0A胶芯	LCP UL94V-0 本色
②	1.0S上接端子	磷青铜/表面镀锡
③	1.0A后盖	LCP UL94V-0 黑色
④	1.0A焊片	黄铜/表面镀锡

Table of Dimensions (DIM A, DIM B, DIM C, DIM D, DIM E, DIM F, DIM G, DIM H, DIM I, DIM J, DIM K, DIM L, DIM M, DIM N, DIM O, DIM P, DIM Q, DIM R, DIM S, DIM T, DIM U, DIM V, DIM W, DIM X, DIM Y, DIM Z, DIM AA, DIM AB, DIM AC, DIM AD, DIM AE, DIM AF, DIM AG, DIM AH, DIM AI, DIM AJ, DIM AK, DIM AL, DIM AM, DIM AN, DIM AO, DIM AP, DIM AQ, DIM AR, DIM AS, DIM AT, DIM AU, DIM AV, DIM AW, DIM AX, DIM AY, DIM AZ, DIM BA, DIM BB, DIM BC, DIM BD, DIM BE, DIM BF, DIM BG, DIM BH, DIM BI, DIM BJ, DIM BK, DIM BL, DIM BM, DIM BN, DIM BO, DIM BP, DIM BQ, DIM BR, DIM BS, DIM BT, DIM BU, DIM BV, DIM BW, DIM BX, DIM BY, DIM BZ, DIM CA, DIM CB, DIM CC, DIM CD, DIM CE, DIM CF, DIM CG, DIM CH, DIM CI, DIM CJ, DIM CK, DIM CL, DIM CM, DIM CN, DIM CO, DIM CP, DIM CQ, DIM CR, DIM CS, DIM CT, DIM CU, DIM CV, DIM CW, DIM CX, DIM CY, DIM CZ, DIM DA, DIM DB, DIM DC, DIM DD, DIM DE, DIM DF, DIM DG, DIM DH, DIM DI, DIM DJ, DIM DK, DIM DL, DIM DM, DIM DN, DIM DO, DIM DP, DIM DQ, DIM DR, DIM DS, DIM DT, DIM DU, DIM DV, DIM DW, DIM DX, DIM DY, DIM DZ, DIM EA, DIM EB, DIM EC, DIM ED, DIM EE, DIM EF, DIM EG, DIM EH, DIM EI, DIM EJ, DIM EK, DIM EL, DIM EM, DIM EN, DIM EO, DIM EP, DIM EQ, DIM ER, DIM ES, DIM ET, DIM EU, DIM EV, DIM EW, DIM EX, DIM EY, DIM EZ, DIM FA, DIM FB, DIM FC, DIM FD, DIM FE, DIM FF, DIM FG, DIM FH, DIM FI, DIM FJ, DIM FK, DIM FL, DIM FM, DIM FN, DIM FO, DIM FP, DIM FQ, DIM FR, DIM FS, DIM FT, DIM FU, DIM FV, DIM FW, DIM FX, DIM FY, DIM FZ, DIM GA, DIM GB, DIM GC, DIM GD, DIM GE, DIM GF, DIM GG, DIM GH, DIM GI, DIM GJ, DIM GK, DIM GL, DIM GM, DIM GN, DIM GO, DIM GP, DIM GQ, DIM GR, DIM GS, DIM GT, DIM GU, DIM GV, DIM GW, DIM GX, DIM GY, DIM GZ, DIM HA, DIM HB, DIM HC, DIM HD, DIM HE, DIM HF, DIM HG, DIM HH, DIM HI, DIM HJ, DIM HK, DIM HL, DIM HM, DIM HN, DIM HO, DIM HP, DIM HQ, DIM HR, DIM HS, DIM HT, DIM HU, DIM HV, DIM HW, DIM HX, DIM HY, DIM HZ, DIM IA, DIM IB, DIM IC, DIM ID, DIM IE, DIM IF, DIM IG, DIM IH, DIM II, DIM IJ, DIM IK, DIM IL, DIM IM, DIM IN, DIM IO, DIM IP, DIM IQ, DIM IR, DIM IS, DIM IT, DIM IU, DIM IV, DIM IW, DIM IX, DIM IY, DIM IZ, DIM JA, DIM JB, DIM JC, DIM JD, DIM JE, DIM JF, DIM JG, DIM JH, DIM JI, DIM JJ, DIM JK, DIM JL, DIM JM, DIM JN, DIM JO, DIM JP, DIM JQ, DIM JR, DIM JS, DIM JT, DIM JU, DIM JV, DIM JW, DIM JX, DIM JY, DIM JZ, DIM KA, DIM KB, DIM KC, DIM KD, DIM KE, DIM KF, DIM KG, DIM KH, DIM KI, DIM KJ, DIM KK, DIM KL, DIM KM, DIM KN, DIM KO, DIM KP, DIM KQ, DIM KR, DIM KS, DIM KT, DIM KU, DIM KV, DIM KW, DIM KX, DIM KY, DIM KZ, DIM LA, DIM LB, DIM LC, DIM LD, DIM LE, DIM LF, DIM LG, DIM LH, DIM LI, DIM LJ, DIM LK, DIM LL, DIM LM, DIM LN, DIM LO, DIM LP, DIM LQ, DIM LR, DIM LS, DIM LT, DIM LU, DIM LV, DIM LW, DIM LX, DIM LY, DIM LZ, DIM MA, DIM MB, DIM MC, DIM MD, DIM ME, DIM MF, DIM MG, DIM MH, DIM MI, DIM MJ, DIM MK, DIM ML, DIM MM, DIM MN, DIM MO, DIM MP, DIM MQ, DIM MR, DIM MS, DIM MT, DIM MU, DIM MV, DIM MW, DIM MX, DIM MY, DIM MZ, DIM NA, DIM NB, DIM NC, DIM ND, DIM NE, DIM NF, DIM NG, DIM NH, DIM NI, DIM NJ, DIM NK, DIM NL, DIM NM, DIM NO, DIM NP, DIM NQ, DIM NR, DIM NS, DIM NT, DIM NU, DIM NV, DIM NW, DIM NX, DIM NY, DIM NZ, DIM OA, DIM OB, DIM OC, DIM OD, DIM OE, DIM OF, DIM OG, DIM OH, DIM OI, DIM OJ, DIM OK, DIM OL, DIM OM, DIM ON, DIM OO, DIM OP, DIM OQ, DIM OR, DIM OS, DIM OT, DIM OU, DIM OV, DIM OW, DIM OX, DIM OY, DIM OZ, DIM PA, DIM PB, DIM PC, DIM PD, DIM PE, DIM PF, DIM PG, DIM PH, DIM PI, DIM PJ, DIM PK, DIM PL, DIM PM, DIM PN, DIM PO, DIM PP, DIM PQ, DIM PR, DIM PS, DIM PT, DIM PU, DIM PV, DIM PW, DIM PX, DIM PY, DIM PZ, DIM QA, DIM QB, DIM QC, DIM QD, DIM QE, DIM QF, DIM QG, DIM QH, DIM QI, DIM QJ, DIM QK, DIM QL, DIM QM, DIM QN, DIM QO, DIM QP, DIM QQ, DIM QR, DIM QS, DIM QT, DIM QU, DIM QV, DIM QW, DIM QX, DIM QY, DIM QZ, DIM RA, DIM RB, DIM RC, DIM RD, DIM RE, DIM RF, DIM RG, DIM RH, DIM RI, DIM RJ, DIM RK, DIM RL, DIM RM, DIM RN, DIM RO, DIM RP, DIM RQ, DIM RR, DIM RS, DIM RT, DIM RU, DIM RV, DIM RW, DIM RX, DIM RY, DIM RZ, DIM SA, DIM SB, DIM SC, DIM SD, DIM SE, DIM SF, DIM SG, DIM SH, DIM SI, DIM SJ, DIM SK, DIM SL, DIM SM, DIM SN, DIM SO, DIM SP, DIM SQ, DIM SR, DIM SS, DIM ST, DIM SU, DIM SV, DIM SW, DIM SX, DIM SY, DIM SZ, DIM TA, DIM TB, DIM TC, DIM TD, DIM TE, DIM TF, DIM TG, DIM TH, DIM TI, DIM TJ, DIM TK, DIM TL, DIM TM, DIM TN, DIM TO, DIM TP, DIM TQ, DIM TR, DIM TS, DIM TT, DIM TU, DIM TV, DIM TW, DIM TX, DIM TY, DIM TZ, DIM UA, DIM UB, DIM UC, DIM UD, DIM UE, DIM UF, DIM UG, DIM UH, DIM UI, DIM UJ, DIM UK, DIM UL, DIM UM, DIM UN, DIM UO, DIM UP, DIM UQ, DIM UR, DIM US, DIM UT, DIM UU, DIM UV, DIM UW, DIM UX, DIM UY, DIM UZ, DIM VA, DIM VB, DIM VC, DIM VD, DIM VE, DIM VF, DIM VG, DIM VH, DIM VI, DIM VJ, DIM VK, DIM VL, DIM VM, DIM VN, DIM VO, DIM VP, DIM VQ, DIM VR, DIM VS, DIM VT, DIM VU, DIM VV, DIM VW, DIM VX, DIM VY, DIM VZ, DIM WA, DIM WB, DIM WC, DIM WD, DIM WE, DIM WF, DIM WG, DIM WH, DIM WI, DIM WJ, DIM WK, DIM WL, DIM WM, DIM WN, DIM WO, DIM WP, DIM WQ, DIM WR, DIM WS, DIM WT, DIM WU, DIM WV, DIM WW, DIM WX, DIM WY, DIM WZ, DIM XA, DIM XB, DIM XC, DIM XD, DIM XE, DIM XF, DIM XG, DIM XH, DIM XI, DIM XJ, DIM XK, DIM XL, DIM XM, DIM XN, DIM XO, DIM XP, DIM XQ, DIM XR, DIM XS, DIM XT, DIM XU, DIM XV, DIM XW, DIM XX, DIM XY, DIM XZ, DIM YA, DIM YB, DIM YC, DIM YD, DIM YE, DIM YF, DIM YG, DIM YH, DIM YI, DIM YJ, DIM YK, DIM YL, DIM YM, DIM YN, DIM YO, DIM YP, DIM YQ, DIM YR, DIM YS, DIM YT, DIM YU, DIM YV, DIM YW, DIM YX, DIM YY, DIM YZ, DIM ZA, DIM ZB, DIM ZC, DIM ZD, DIM ZE, DIM ZF, DIM ZG, DIM ZH, DIM ZI, DIM ZJ, DIM ZK, DIM ZL, DIM ZM, DIM ZN, DIM ZO, DIM ZP, DIM ZQ, DIM ZR, DIM ZS, DIM ZT, DIM ZU, DIM ZV, DIM ZW, DIM ZX, DIM ZY, DIM ZZ



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承 认 书

SPECIFICATION FOR APPROVAL

客 户 Customer:

产品名称 Project:

FPC

规格型号 Part No:

1.0-5P CTXJ-H2.5 119

贵公司承认印 Approval signatures

料 号/Part No.	签 章/Signatures

日期 Date:

拟制/Drawn	李春风	
审核/Check	钟华华	
批准/Approved	罗孝金	

产 品 规 格 书

PRODUCT SPECIFICATION

【1】适用范围 SCOPE

本规格书适用于：1.0间距柔性扁平电缆连接器

This specification covers the 1.0mm Pitch FPC/FFC Connectors

【2】产品名称及型号 PRODUCT NAME AND PART NUMBER

产品名称 Product Name	产品型号 Part Number
FFC/FPC 扁平电缆连接器	

【3】定格 RATINGS

项目 Item	规 格	Requirement
最大容许电压 Rated Voltage(MAX)	50V	[AC/DC (有效值 Virtual value)50Hz]
最大容许电流 Rated Current(MAX)	0. 5A	
使用温度范围 Ambient temperature Range		-25℃ ～ +85℃

【4】性能 PERFORMANCE

4.1 电气性能 Electrical Performance

项目 Item		条 件 Test Condition	规格 Requirement
4.1.1	接触电阻 Contact Resistance	适合 FPC/FFC 嵌合；开放电压 20mV 以下；短路电流 10mA 的状态下测定。 Mate applicable FPC/FFC and measure by dry circuit, 20mV MAX, 10mA.	30 m Ω MAX
4.1.2	绝缘电阻 Insulation Resistance	适合 FPC/FFC 嵌合；相邻端子间或端子与地面间加 DC 500V 下测定。 Mate applicable FPC/FFC and apply 500V DC between adjacent terminal or ground.	500M Ω MIN
4.1.3	耐电压 Dielectric	适合 FPC/FFC 嵌合；相邻端子间或端子与地面间加 AC 250V（有效值）历时 1 分钟下测定。 Mate applicable FPC/FFC and apply 250V AC（virtual value）for 1minute between adjacent terminal or ground.	无击穿现象 No Breakdown

4.2 机械性能 Mechanical Performance

项目 Item		条 件 Test Condition	规格 Requirement
4.2.1	锁紧力及拔出力 Locking and Withdrawal Force	适合 0.3mm 厚的 FFC；用每分钟 25 ± 3 mm 的速度；平行地插入、锁紧、拔出。 Insert and extract applicable FFC at the speed rate of 25 ± 3 mm/minute.	锁紧力 Locking $1.96 * n$ (N) MAX 拔出力 Withdrawal $0.49 * n$ (N) MIN
4.2.2	端子保持力 Terminal /Housing Retention Force	以用每分钟 25 ± 3 mm 的速度平行向外拉 Pull the terminal at the speed rate of 25 ± 3 mm per minute	0.25N MIN

4.3 环境和其他性能 Environmental Performance and Others

项目 Item		条 件 Test Condition	规格 Requirement	
4.3.1	重复插拔 Repeated Insertion and Withdrawal	无通电状态；以 10 次/分钟的速度插拔 20 次 Insertion and withdrawal actuator up to 20 cycles at the speed rate of less than 10 cycles/minute	接触抵抗 Contact Resistance	60 m Ω MAX
4.3.2	温度上升 Temperature Rise	适合 FPC/FFC 嵌合；最大容许电流通电，温度测定。（UL 498） Carrying rated current load.（UL 498）	温度上升 Temperature Rise	30 $^{\circ}$ C MAX

项目 Item		条 件 Test Condition	规格 Requirement	
4.3.3	耐振动性	DC 1mA 通电状态下；嵌合轴沿 XYZ 三个方向振动；振幅 1.5mm；频率	外观 Appearance	无损坏 No Damage

	Vibration	10-55-10Hz/分；历时 2 小时 Amplitude: 1.5mm P-P Sweep time: 10-55-10Hz in 1 minute Duration: 2 hours in each X.Y.Z. axes	接触抵抗 Contact Resistance	60 m Ω MAX
			瞬断 Discontinuity	1 ms MAX.
4.3.4	耐冲击性 Shock	DC 1mA 通电状态下；嵌合轴沿相互垂直的 6 个方向；以 490m/s2 {50G} 冲击；各 3 次 490m/s2 {50G}，3 strokes in each X.Y.Z. axes.	外观 Appearance	无损坏 No Damage
			瞬断 Discontinuity	1 ms MAX.
4.3.5	耐热性 Heat Resistance	适合 FPC/FFC 嵌合；85±2℃的空气中；放置 96 小时；再回到室温中放置 1-2 小时 85±2℃，96 hour	外观 Appearance	无损坏 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX
4.3.6	耐寒性 Cold Resistance	适合 FPC/FFC 嵌合；-40±2℃的空气中；放置 96 小时；再回到室温中放置 1-2 小时 -40±2℃，96 hour	外观 Appearance	无损坏 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX
4.3.7	耐湿性 Humidity	适合 FPC/FFC 嵌合；40±2℃、相对湿度 90-95%的空气中；放置 96 小时；再回到室温中 0.5 小时内测定 Temperature: 40±2℃ Relative Humidity: 90-95% Duration: 96 Hours	外观 Appearance	无损坏 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX
			耐电压 Dielectric Strength	必须满足 4.1.3 Must meet 4.1.3
			绝缘抵抗 Insulation Resistance	20 M Ω MIN
4.3.8	温度循环 Temperature Cycling	适合 FPC/FFC 嵌合；-55±3℃ 30 分钟；常温常湿 10-15 分钟；85±2℃ 30 分钟；常温常湿 10-15 分钟，循环 5 次。 5 cycles of: a) -55±3℃ 30 minutes b) 85±2℃ 30 minutes	外观 Appearance	无损坏 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX
项目 Item		条 件 Test Condition	规格 Requirement	
4.3.9	耐盐雾性 Salt Spray	适合 FPC/FFC 嵌合；35±2℃、5±1% 的盐水喷雾 24 小时；试验后常温水洗；再室温干燥。 24±4 hours exposure to a salt spray from the 5±1% solution at 35±2℃.	外观 Appearance	无损坏、腐蚀 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX

4.3.10	耐亚硫酸 SO ₂ Gas	适合 FPC/FFC 嵌合; 40±2℃、50±5ppm 的亚硫酸中放置 24 小时 24 hours exposure to 50 ± 5ppm. SO ₂ gas at 40±2℃.	接触抵抗 Contact Resistance	60 m Ω MAX
4.3.11	耐氨性 NH ₃ Gas	适合 FPC/FFC 嵌合; 浓度为 28% 的氨水容器中; 放置 40 分钟。 40 minutes exposure to NH ₃ gas evaporating from 28% Ammonia solution	外观 Appearance	无损坏 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX
4.3.12	可焊性 Solder ability	端子前端基准面 0.2mm 处浸入 245±5℃ 的锡槽中; 历时 2±0.5 sec。 Soldering Time: 2±0.5 sec. Soldering Temperature: 245±5℃ 0.2 mm from terminal tip	沾敷性 Solder Wetting	沾敷面积 95%以上
4.3.13	耐焊接热 Resistance to Soldering heat	在 245±5℃ 热风炉中经 30±5sec 条件下, 至少进行 5 次。 Soldering Time: 30±5 sec. Soldering Temperature: 245±5℃	外观 Appearance	无损坏、变形 No Damage

() : 参考规格 Reference Standard

{ } : 参考单位 Reference Unit

【5】外观形状、寸法及材质 PRODUCT SHAPE, DIMENSIONS AND MATERIALS

图面参照 Refer to the drawing.

名 称 NAME	材 质 MATERIALS
主体 Main body	LCP UL 94V-0
锁扣 Housing Lock	LCP UL 94V-0
端子 Sit uip	磷青铜 Phosphor Bronze
焊片 Contact	磷青铜 Phosphor Bronze
备注 Remark	金属表面镀锡